

SM3H unit 8 test review answers

1. 1
2. $\sec^2 x$
3. $2 \sec x$
4. $-\cot^2 x$
5. 1
6. 1
7. work is the answer
8. work is the answer
9. work is the answer
10. work is the answer
11. work is the answer
12. work is the answer
13. $\sin \alpha = -\frac{2\sqrt{5}}{5}$ $\csc \alpha = -\frac{\sqrt{5}}{2}$
 $\cos \alpha = \frac{\sqrt{5}}{5}$ $\sec \alpha = \sqrt{5}$
 $\tan \alpha = -2$ $\cot \alpha = -\frac{1}{2}$
14. $\frac{\sqrt{2}-\sqrt{6}}{4}$
15. $\frac{\sqrt{6}-\sqrt{2}}{4}$
16. $\frac{-3+\sqrt{3}}{3+\sqrt{3}}$ or $\frac{1-\sqrt{3}}{1+\sqrt{3}}$ or $-2 + \sqrt{3}$
17. $\frac{-\sqrt{2}+\sqrt{6}}{4}$
18. $-\frac{\sqrt{2}}{2}$
19. $\frac{1}{2}$
20. $\frac{-10-12\sqrt{21}}{65}$
21. $\frac{-16\sqrt{2}-15}{51}$
22. $x = \frac{5\pi}{12} + \pi k$ and $x = \frac{7\pi}{12} + \pi k$
23. $30^\circ, 210^\circ, 60^\circ, 240^\circ$
24. $0^\circ, 180^\circ, 45^\circ, 135^\circ, 225^\circ, 315^\circ$
25. $0^\circ, 180^\circ$
26. $\frac{3\pi}{2}$
27. $90^\circ, 270^\circ, 30^\circ, 330^\circ$